

ABSTRACT OF THE DISCLOSURE

A layer structure usable in manufacturing an integrated circuit is made, in a single apparatus, by a particular process in which a patterned substrate is provided. An electrolyte solution, out of which a conductive material can be plated under an applied potential, is supplied over a surface of the patterned substrate, and a potential is applied so as to deposit a film of the conductive material out of the electrolyte solution and over the surface of the patterned substrate. The film of conductive material is preferably polished as it is deposited. The conductive material is then removed from field regions of the patterned substrate, while deposits of the conductive material are left in features defined in the patterned substrate. The deposits of the conductive material are then electrically isolated, resulting in the layer structure.

DEPARTMENT OF COMMERCE